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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,034	05/23/2000	James K. Guenter	M10 26373 US	3363

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EXAMINER	
VY, HUNG T	

ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/577,034	Applicant(s) GUENTER ET AL.	
	Examiner Hung T Vy	Art Unit 2828	

-- The MAILING DATE of this communication app ars on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

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SUPERVISORY PATENT EXAMINER
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Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☒ Interview Summary (PTO-413) Paper No(s). *18* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. In response to applicant's amendment filed on 9/08/2003 and telephone interview on 09/17/2003, claims 1-22 are pending in this application and the final rejection has been withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 14,15-19 and 22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and 15, the phase " a polarization medium positioned in proximal relation to the laser source element for polarizing the light output in third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally " renders the claims indefinite because the claims recite only a laser source element and a polarization medium without the recitation the structure of device in order to perform how the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally. The sole recitation of a laser source element and a polarization medium in the

claim fail to conform any clear polarization control optical energy source to further limit the invention as shown in figures 3a-4c.

Claims 2-19 and 22 depend from rejected claims 1 and 15 thereby render these dependent claims indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1,2,4-7,10-12, and15-19 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Davis et al, U.S. patent No. 6,069,905 or by Cohen et al., U.S. patent No. 6,302,596 or by Scott et al., U.S. Patent No. 6,567,435.

5. Regarding to claims 1, 5, 10, and 21, Davis et al. discloses a polarization controlled optical energy source, comprising:

A laser source (10) that produces a light output that has one and/or both of at least two polarization states (see Fig 3 and see column 4, line 45-64); and polarization medium (37) positioned in proximal relation to the laser source element (See column 5, line 1-32). It is inherent that at an incidence angle of the light to medium then the

polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (see fig. 1,3).

Regarding claims 2,6 and 7, Davis et al, discloses the source, wherein said laser source element is disposed within a component package having an emission aperture formed therein. (See column 3, lines 13, and column 3, lines 2 and fig 3).

Regarding to claim 4, Davis et al, discloses the source, wherein said laser source element (10) has multiple distinct polarization states oriented with respect to one another at angular intervals. (See fig 13).

Regarding to claim 11, Davis et al. discloses the source, wherein said polarization medium 39 is affixed to the component package spanning the emission aperture (See Fig 7).

Regarding to claim 12, Davis et al. discloses the source, wherein said polarization medium (37) is disposed within the component package between the vertical cavity surface emitting laser (10) and the emission aperture. (See column 5, line 1-32 and fig 7).

With respect to claims 15-19 and 22, the methods for VCSEL polarization control are considered as product by process steps.

6. Regarding to claims 1, 5, 10, and 21,Cohen et al. discloses a polarization controlled optical energy source, comprising: a laser source (134) that produces a light output that has one and/or both of at least two polarization states (see Fig 2 and all the laser source have two polarization as photons in there dimensional space with at least

two polarization states as p and s); and polarization medium (140) positioned in proximal relation to the laser source element (See fig. 2). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (see fig. 2).

7. Regarding to claims 1, 5, 10, and 21, Scott et al. discloses a polarization controlled optical energy source, comprising: a laser source (36) that produces a light output that has one and/or both of at least two polarization states (see Fig 4 and all the laser source have two polarization as photons in there dimensional space with at least two polarization states as p and s); and polarization medium (42) positioned in proximal relation to the laser source element (See fig. 4, 5,6 or 9). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (see fig. 2,4, 5,6 or 9).

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth insection 102 of this title, if the differences between the subject matter sought to be patented and the prior

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 3, 8, 9,13, 14, and 20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Davis et al, U.S. No. 6,069,905, Cohen et al., U.S. patent No. 6,302,596 or by Scott et al., U.S. Patent No. 6,567,435 in view of Jewell et al, U.S. Patent No. 5,331,654.

Regarding claims 3, 8, 9,13, 14, and 20, Davis et al. or Cohen et al. or Scott et al. disclose a polarization controlled optical energy source with a package base, a vertical cavity surface emitting laser device, package cover, and polarization medium but Davis et al. or Cohen et al. or Scott et al. do not disclose polarization medium (37) provides linear polarization, laser source element has two distinct polarization states that are normal to one another, polarization medium is formed from a sheet polarization material. However, Jewell et al. disclose polarization medium 68 provides linear polarization (See column 7, line 19-27), the source, wherein said polarization medium provides linear polarization (See column 7, line 19-27), laser source element has two distinct polarization states that are normal to one another (See column 4, line33 – 36 and Fig 10), and polarization medium is formed from a sheet polarization material. See column 4, line 39 – 55.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Davis et al. to have linear polarization and a sheet polarization material that of Jewell et al., because those skilled

in the art will recognize that such modification and variations can be made without departing from the spirit of, but further increasing the performance of, the invention of Jewell et al.

Response to Arguments

10. Applicant's arguments filed on 09/08/2003 have been fully considered and are persuasive. Therefore, the final rejection have been withdrawn but the applicant's filed on 03/31/2003 with respect this rejection(s) of claim 1-22 have been fully considered and they are not persuasive. Applicant made the following arguments:

a. "Davis et al. appear to minimize any polarization effects on the reflected and transmitted light. In addition, applicants would like to point out that polarization selectively in Davis et al. does not mean polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization stage equally or substantially equally, as reacted in claim 1" page 9 first full paragraph.

b. "Davis et al. is disqualified as prior art under 35 U.S. C 103 (c) and claims 3,8,9,13,1,4,20 and 22 are all believed to be in condition for allowance " page 10 four full paragraph.

c. "Thus, the bull '341 patent does not teach or suggest a laser diode assembly that includes plurality of removable linear laser diode bars and a plurality of spacer in which respective pairs of spacers maintain a predetermined

spaced apart relationship with ..... by mended independent claims 1,6 and 12" page 13, first full paragraph.

In response to Applicant's argument **a** above, the applicant's argument is not persuasive because the claims recite only a laser source element and a polarization medium positioned in proximal relation to the laser source element without recite how the device performs the output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally. The claims fail to comply with 35 U.S. C. 112, 2nd paragraph. Davis et al. recites the laser source that produce a light output that has at least two polarization state (see column 4, line 47-64) and polarization medium position in proximal relation to the laser element so Davis et al. also gets the same result as application even though Davis et al. appear to minimize any polarization effects on the reflected and transmitted light but Davis et al. recites all element and limitation of this invention.

In response to applicant's argument b above, Applicant's argument is uncorrected because the rejection is under 35 U.S.C (c), and the rejection is not 35 U.S.C (a) as application recites as applicant's argument (the 35 U.S.C 103 states :(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth insection 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.).

Conclusion

11. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (703) 605-0759. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Paul Ip

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Hung T. Vy

Art Unit 2828

September 19, 2003